

DESIGNING HIGHER ORDER THINKING SKILLS (HOTS) ASSESSMENT FOR DIVERSE STUDENTS: TRENDS AND CHALLENGES

THESIS

**Submitted in partial fulfillment of the requirement for the degree of
Sarjana Pendidikan (S.Pd) in Teaching English**



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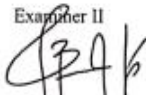
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ABSTRACT

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Designing a test with Higher Order Thinking Skills (HOTS) component is in line with the goal of the curriculum 2013 within the context of Indonesian schools. The aspect of thinking in HOTS should be attached in test items, and this may be challenging for teacher in Indonesia. This research aimed to explore the trends and challenges of Indonesia EFL teachers in designing HOTS assessment, particularly for diverse students. To explore this issue, this study interviewed four EFL teachers and analyzed their made tests. The finding indicated that teachers tend to design the test that cover three aspects of HOTS: *analysis, judgment and critical thinking*, and *logic and reasoning skills*. Also, participating teachers said that they found some challenges when designing HOTS assessment: limiting knowledge about HOTS assessment, finding a source about how to design HOTS assessment for English subject, finding idea to write question that assess HOTS, managing time, mapping learning domain, deciding level of difficulty, and building literacy assessment. This finding highlights that it is essential for English teachers to have a professional program, particularly on how to construct good test that cover the aspect of HOTS. Thus, this can minimize the challenges that the teachers found in this study.

ABSTRAK

Jannah, Indah Miftakhul. (2019). “Designing Higher Order Thinking Skill (HOTS) Assessment For Diverse Students: Trends and Challenges” An undergraduate Thesis. English Education Department. Faculty of Education and Teacher Training, Sunan Ampel State Islamic University, Surabaya.

Kata kunci: Kemampuan berfikir tingkat tinggi, kecenderungan, tantangan

Mendesain sebuah tes yang memiliki unsur kemampuan berfikir tingkat tinggi siswa selaras dengan tujuan Kurikulum 2013 dalam konteks Sekolah Menengah Atas di Indonesia. Aspek berfikir dalam kemampuan berfikir tingkat tinggi harus diberikan dalam tes siswa, dan ini mungkin menjadi tantangan bagi guru di Indonesia. Penelitian ini bertujuan untuk mengetahui kecenderungan dan tantangan guru dalam mendesain assessmen berbasis kemampuan berfikir tingkat tinggi (HOTS) khususnya untuk siswa yang berbeda-beda. Untuk mengeksplorasi masalah ini, penelitian ini mewawancarai empat guru Bahasa Inggris dan menganalisa bentuk tes mereka. Hasil dari penelitian ini mengindikasikan bahwa kebanyakan guru mengukur kemampuan berfikir tingkat tinggi siswa pada 3 aspek yakni analisis, berfikir kritis, dan kemampuan bergumen yang logis. Guru mengatakan bahwa mereka menemui berbagai macam tantangan ketika mendesain HOTS assessmen: keterbatasan pengetahuan mengenai assessmen untuk HOTS, mencari sumber bacaan tentang bagaimana menyusun soal HOTS untuk mata pelajaran Bahasa Inggris, mencari ide untuk menulis pertanyaan yang mengukur HOTS, mengatur waktu, memetakan bidang pembelajaran, menentukan tingkat kesulitan, membangun assessmen literasi. Guru Bahasa Inggris harus memiliki sebuah program pelatihan lagi khususnya dalam menyusun sebuah tes untuk HOTS yang dapat melingkupi seluruh aspek berfikir dalam HOTS. Dengan begitu segala tantangan yang ditemukan dalam penelitian ini dapat diminimalisir.

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CHAPTER 1

INTRODUCTION

This chapter presents the researcher's purpose in conduct this study. Then, it continues with the research questions that came up from some cases. It also continues with the objective of the study to show the aim of this research. Furthermore, scope and limitation and definition of key terms also provided in this research to avoid misunderstanding and help the reader know this study.

A. Background of Study

High Order Thinking Skills or HOTS became a hot issue when K-13 applied in Indonesia. It becomes a current issue among educators because higher order thinking skill is needed to face challenges in 21st Century. Bernie Trilling classified 21st century life skill into seven skills: (1) critical thinking (2) creativity (3) communication (4) collaboration career and learning self-reliance (5) cross cultural understanding and (6) computing / OCT literacy.¹ Critical thinking is part of Higher Order Thinking Skills by many researcher and scholars. Crowl et.al stated that “critical thinking” as a part of the process of evaluating the evidence collected in problem solving or the results produced by thinking creatively.² Additionally, 21st century life skill needs a skill that supports the quality worker in Indonesia, especially for business and industry. HOTS is the gate to face industry 4.0 in the future.

Othman et al defined High Order Thinking Skills as a skill to describe, interpret, create, reflect and correlate with new condition that need by student.³ According to Bloom, three taxonomies (cognitive, affective, and psychomotor), lower levels provides a base for higher levels of learning and Higher Order Thinking Skills

¹ I Wayan Widana, "Higher Order Thinking Assessment (HOTS)". JISAE. Volume 3 No.1 Ikacana Publisher, 2017, 32

² F.J King et.al. *Higher Order Thinking Skill*, 17

³ Mohd Syaubari Bin Othman and Ahmad Yunus Bin Kassim, "Teaching Practice of Islamic Education Teachers Based on Higher Order Thinking Skill (HOTS) in Primary School in Malaysia: An Overview of the Beginning". *International Journal of Academic Research in Business and Social Sciences*. Vol.7 No 3, 2017. 401

B. Research Question

1. What are the trends of HOTS assessment designed by teacher for diverse students?
2. What are the challenges in designing HOTS assessment for diverse students?

The objectives of the research are below.

1. To explore the trends of teacher in designing HOTS assessment for diverse students. This study analyzes deeply the form of Higher Order Thinking Skill assessment to know what aspect of thinking mostly assess by teacher for diverse students.
2. To describe the challenges of teacher in designing HOTS assessment for diverse students. Particularly, this study

E. Scope and Limitation

There are two scope on this research, they are trends and challenges. In the term of trends, this research focused on form of questions' made by English teacher to train Higher Order Thinking Skill for diverse students. In this part, the study discussed deeply the aspect of thinking in Higher Order Thinking Skill mostly used by English teacher. The aspects of thinking in Higher Order Thinking Skills are analysis, evaluation, creation, logical reasoning, judgment and critical thinking, problem solving, creativity and creative thinking. Besides, this study also focus on the challenges that faced by English teacher in designing assessment for HOTS especially for diverse students.

Furthermore, this study limited to English teachers who teach in Senior High School in MAN Surabaya, MAN 1 Mojokerto, MA Al Fatic and MA Hasyim Asyari, because the level domain of Higher Order Thinking Skills (analyze, evaluate and create) mostly found in high school level. This research conducted in Senior High School that applied K- 13 and category class system. In category class system, high and low achieving student place in different class like Excellent and Regular class. So, the trends and challenges in design HOTS assessment for diverse students may be detect. The differences of assessment that given to students by teacher in Excellent and Regular class may be revealed.

F. Definition of Key Terms

In order to have the same idea and concept in this study, the researcher clarifies the terms used in this study, as the details are:

1. Higher Order Thinking Skills

According to FJ King et al, critical, logical, reflective, metacognitive, and creative thinking are include in Higher Order Thinking Skills¹⁰. In this study, Higher Order Thinking Skills is

¹⁰ F.J King et.al . *Higher Order Thinking Skill*, 1

According to Maryati trend is a general development or change in a situation or in the way that people are behaving, it is an activity of tendency up or down for a period of time.¹¹ In this study trend defined as the majority of teacher in deciding the assessment of Higher Order Thinking Skill especially for diverse students in their daily activity.

According to Toynbee is something difficult which requires great effort and determination, something like test, strength, skill or ability.¹² This study defined challenge as situation that make teacher to do effort more when give a HOTS assessment for diverse students.

Tileston said that student who came from different ways such as race, ethnicity, socio economic, status, gender, learning, modalities, cognitive development, social development.¹³ In this research, diverse student means students who have different cognitive development. It refers to high and low achieving student. School who has category class system will easy to detect high and low achieving student, because the school place student based on their cognitive skill. For example, students in same level have several class, XI 1, XI 2,

¹³ Dona Walker Tileston. *Training Manual for What Every Teacher Should Know* (Thousand Oak : Corwin Press), 2005. 1

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presented a brief explanation about the theories that support this research. There are two parts of this chapter, the review related literature and review related studies. In review related studies discussed the principal, trend in assessment and challenges regarding with designing Higher Order Thinking Skills assessment.

A. Review of Related Literature

1. Principle for Assessing HOTS

According to Brookhart, there are three basic principals to construct the assessment. The three basic are specify clearly and exactly what it is you want to assess, design task or test items that require student to demonstrate the knowledge or skill, and decide what you will take as evidence of the degree to which students have shown the knowledge or skill.¹⁵ First, Specify clearly and exactly what it is you want to assess. In this part, before give the assessment, teacher should check clearly the learning goal of the lesson. It will help the teacher to make sure that the assessment is relevant. Second, design task or test items that require students to demonstrate the knowledge or skill. Teacher should give an assessment which is make student interest to make effort to apply their knowledge or skill. The assessment provides individual test or task that represents the knowledge. Third, decide what you will take as evidence of the degree to which students have shown the knowledge or skill. Teacher should has a plan after give an assessment. Those probably formative or summative assessment. Teacher should give a feedback for student if give formative assessment. On other hand, teacher should show the score if give summative assessment.

There are several additions to assess Higher Order Thinking Skills based on Brookhart, use introductory material,

¹⁵ Sussan Brookhart. *How to Asses High Order Thinking in Classroom*. (USA : ASCD), 2010, 17-25

According Sugrue, there are three ways to measuring Higher Order Thinking Skills: (1) selection (multiple choice, matching), (2) generation (short answer, essay, performance), and (3) explanation (giving reasons for selection or generation of a response).¹⁷ Moreover, there are another form to deliver HOTS assessment from PISA which is used in *Modul Penyusunan Higher Order Thinking Skill (HOTS)* from the Ministry Of Education and Culture Indonesia. They are (1) multiple choice (2) complex multiple choice (3) short essay or gap filling task (4) short answer question (5) essay.¹⁸

According to Brown, multiple choice is an item that has a stem and option or alternative. Stem is present the

¹⁸ Direktorat Pembinaan Sekolah Menengah Atas Kemmentrian Pendidikan dan Kebudayaan.. *Modul Penyusunan Soal Higher Order Thinking Skill (HOTS)*. 2017, 6

1) Multiple Choice

Bill of Rights of the United States Constitution

AMENDMENT 1.

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

AMENDMENT 2.

A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

AMENDMENT 3.

No Soldier shall in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

AMENDMENT 4.

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

AMENDMENT 5.

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

AMENDMENT 6.

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defense.

c. Judgment and Critical Thinking

1) Multiple Choice

A marketing executive for a sports shoe company wanted to make the most of his advertising budget. He decided to buy advertising time on television sports broadcasts, reasoning that many people who watched sports would also like to play sports, and therefore need sports shoes. What assumption has to be true in order for this argument to represent sound thinking?

- Figure 2.14 Example of Assessing Judgment and Critical Thinking
in Multiple Choice
Adopted from Susan Brookhart³⁸**

³⁸ Sussan Brookhart. *How to Asses ...* Page 89

may use all of the part of newspaper to figure out the Julius Caesar story.⁴³

4) Challenges in HOTS Assessment

Masters stated that there are several challenges in reforming educational assessment. They are repurposing assessment, mapping learning domain, implementing a learning assessment system, building assessment literacy, and concluding comment.⁴⁴ First, repurposing assessment. People still have a concept that assessment is to judge the student have learned the material that have been taught by teacher. Over time, educators try to change this misconception of assessment. The mindset should be change. Assessment is aim to establish the learner in their process to reach the goal of learning. It refer how teacher monitoring the progress of student. Second, mapping learning domains. Teacher should concept the learning process appropriate with the goal. It means that the teacher make a sure that student in their learning progress represent the learning domain that should be achieve. Third, implementing a learning assessment system. Sometimes, teacher still doubt how to apply the assessment that linear with the learning assessment system from the government. The alignment of learning assessment system with a teacher's concept in assessment is proves that the student in their learning well-defined learning domain. Fourth, building assessment literacy. The development of education assessment try to assume that the assessment which is given appropriate with system. It requires student to explore their thinking on learning process. So, it needs a deep assessment practice. Improve the literacy skill be a good way to upgrade the assessment into high-quality professional development. Fifth, concluding comments. To know the progress of student, teacher should monitor the student in their learning process. Through the monitoring, teachers recommend to give their feedback for student. A good communication between teacher and student as

⁴³ Sussan Brookhart. *How to Asses ...* Page 108

⁴⁴ Geoff N Masters. *Australian Education Review, Reforming Educational Assessment: Imperative, principles and challenges*. (Australia: ACER), 2013, 57 - 63

CHAPTER III

RESEARCH METHOD

This chapter presents the researcher's procedure in conducting this study. It covers research design, subject and setting of study, data and source of the data, research instrument, data collection technique, data analysis technique, and research stage.

A. Research Design

Research design is a plan or a concept made by the researcher for the plan of action that will be conducted.⁵⁶ This study used qualitative method to conduct the research. This study used qualitative approach because this study is going to explore the phenomena of Higher Order Thinking Skills. According to Gary Anderson, qualitative research is a form of inquiry that explores phenomena in their natural settings and uses multi-methods to interpret, understand, explain and bring meaning to them.⁵⁷ Furthermore, qualitative approach is appropriate with this study since it is used to describe and analyze the trends and challenges of teacher in designing Higher Order Thinking Skills assessment for diverse students.

B. Subject and Setting of Study

The subject of this research is English teacher who selected purposively with the criteria (1) applied K-13 in English subject and (2) has experience in teach several class in school that applied category class system. This research took category class because the research easy to collect the data. In category class, the high and low achieving students stay in different place. The trends and challenges of teacher in designing HOTS assessment for diverse students are easy to detect. The researcher curious to investigate what the assessment that given to student in excellent and regular class to

⁵⁶ Suharsini Arikunto. *Prosedur Penelitian Suatu Pendekatan Praktek* (Jakarta : Rineka Cipta, 2002), 51

⁵⁷ Garry Anderson – Nanci Arsenault, *Fundamentals of Educational Research*, 2th edition. (USA: The Framer Press), 126

assess Higher Order Thinking Skill is different or same. 4 English teachers from different school at MAN 1 Mojokerto, MAN Surabaya, MA Al Fatch, and MA Hasyim Asyari, be the subject of this research. These school have category class system.

C. Data and Source of Data

1. Data

The data used in this study is the teacher's questions made to train Higher Order Thinking Skill (HOTS) for student. The result of teacher's interview about challenges in designing HOTS assessment also a data for second problem.

2. Source of Data

Dealing with the assessment to train HOTS, the teacher's assessment had been collected. The document gained from English teacher. The document was analyzed to know the trends of English teacher in designing an assessment to train HOTS for diverse students. The researcher also interviewed the English teacher to know their challenges in constructing the HOTS assessment for diverse students.

D. Research Instruments

Data are required to carry out the findings of this study. Those data can be obtained by using these following instruments:

1. Documents

On the process of research, the researcher collected qualitative documents. Specifically, documents in this research are the assessment of teacher to train Higher Order Thinking Skills of students. It is required to know the form and the aspect of thinking in Higher Order Thinking Skills assessment mostly used by teacher for diverse student. Document analysis

guideline is required to help the researcher in analyzing the data of documentation. (*see appendix I*)

2. Interview

This research used semi-structured interview. In this process, the researcher prepared and developed questions based on the research question. Interview conducted to investigate the challenges that faced by English teacher in designing Higher Order Thinking Skills assessment especially for diverse students. The interview guideline is required to help the researcher in the process of interviewing. (*see appendix 2*)

E. Data Collection Technique

Creswell stated that the data collection steps include setting the boundaries for the study, collecting information through unstructured or semi structured observations and interviews, documents, and visual materials, as well as establishing the protocol for recording information.⁵⁸ In this study, the data is collected from researcher's interview and documentation. At first, the research found the subject of this study. To find the subject, the researcher searched the information from students, teachers, and internet to know the schools that have category class system. Second, the researcher asked the permission to conduct the study in those schools. Third, the school and the researcher decided together the English teacher that being an informant of this study based on several criteria. Fourth, the researcher made an appointment with English teacher to get the data. Fifth, the researcher had asked the document (assessment to train HOTS for student). Sixth, the researcher interviewed the teacher to reveal the challenges in designing HOTS assessment for diverse students. The interview was semi-structured interview, so the questions developed or reduced in conditionally. Moreover, the process of collecting the data was specified in the table below.

⁵⁸ John W Creswell. Research Design Qualitative , Quantitative and Mixed Methods Approaches (UK Sage Publication, 2009), 178

F. Data Analysis Technique

The data, after collection, it processed and analyzed in accordance with the outline laid down for the purpose at the time of developing the research plan. In analyzing qualitative data, this study used inductive analysis to gain the conclusion from documentation and interview. In inductive analysis, the data comes from specific fact or phenomenon to conclude in general. In inductive analysis, the finding data integrated with the exist theory.

1. Document analysis

After collect the assessment of teacher, the researcher read and observed the document. The researcher analyzed 8 questions made by English teacher to assess HOTS. The researcher used a document analysis guideline to check one by one. This research used theory by Sussan Brookhart to classify and analyze the data. Document analysis guideline provides several criteria for every aspect of thinking in HOTS. The researcher categorized the teacher's question made based on the appropriate criteria in document analysis guideline. The researcher also made a note in document analysis to reveal the reason why the teacher's made question categorized in every aspect. If there is a finding data that does not exist in the theory, it becomes a new finding.

2. Interview analysis

After get the result of interview, the researcher processed the data. The researcher transcript all the process of interview. To coding the data, the researcher categorized and classified the data using color. Every color showed different topic. After that, the researcher made an interview summary transcript. Then, the researcher gained the main information about teacher's challenges in designing HOTS assessment for diverse students. This research used the theory by Geoff to classify and analyze the result of interview. If there is a challenges that does not exist in the theory, it becomes a new finding.

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter shows the research findings and discussion about the trends and challenges of teacher in designing Higher Order Thinking Skills for diverse students. In addition, it provided with the analysis of the data which is got from English teacher.

A. Research Findings

There are two terms that discussed in research finding based on research questions. The first sub-section discussed about the trends of HOTS assessment to know the aspect of thinking in HOTS mostly assess by teacher in school. While, in second sub-section described about challenges faced by teacher in designing HOTS assessment for diverse student. The researcher collected the data from 22nd May – 30^h May 2019. The data had been gathered from English teacher. The following explanations are the result:

1. Trends in HOTS assessment for Diverse Students

In case of trends of teacher in designing Higher Order Thinking Skills for diverse students, the researcher finds that there is no differences of assessment that given by English teacher for students in Excellent and Regular class. The teachers gave the same assessment for all of students although they have different cognitive development. There are 8 questions made by English teacher have been analyzed and categorized based on the aspect of thinking in Higher Order Thinking Skills of Susan Brookhart's theory (*see appendix 4*). The data is showed in the figure below.

Figure 4.3 Example of Teacher's Made Question in HOTS for Analysis Aspect (2)

Figure 4.5 Example of Teacher's Made Question in HOTS to Assess Logic and Reasoning Aspect (2)

c. Judgment and Critical Thinking Aspect

**On the spot
littering fines from
\$60 to \$375.**



LITTER

IT'S IN YOUR HANDS

FROM
LITTER NEWS

The notice encourages people to ...

A. keep the cleanliness

B. pay money for the fine

C. fill their hands with litter

D. keep away their hands from litter

[illegible]

2) “it is very difficult to find the inspiration” (Teacher

In designing HOTS assessment, mostly teacher adopt and modified by themselves. They adopted text, dialog, or story from a book or internet then modified it. The faced came up when build or process the provided text into Higher Order Thinking Skills questions.

“hmm the dialog is provided. If the dialog like this, what should I do to make this becomes HOTS. Hmm maybe like this or like this..” (Teacher 1)

In constructing HOTS questions, teacher has deep pressure for a moment, because the teacher thinks hardly to create it. It is need an extra energy to deep thinking.

“ ... finding again and again. How to dig HOTS question. Finally, to create a HOTS question we should sit in hot chair” (Teacher 2)

“.. yes like that, time, thinking, everything is extra than LOTS” (Teacher 3)

d. Managing Time

Time becomes one of problems to create a questions that assess Higher Order Thinking Skills of student. There are two teachers said that time is problem. Teacher felt difficult to process Higher Order Thinking Skills assessment. It took a longer time during processing question for Higher Order Thinking Skills assessment. It is really need an extra time to construct Higher Order Thinking Skills question than usual question. The process concluded finding the text or dialog, modifying, and deciding distractor option in multiple choice questions.

“.. yes like that, **time**, thinking, everything is extra than LOTS” (Teacher 3)

of teacher. It may happen because question or task about analysis is familiar among teacher.

2. Classified Challenges Faced by Teacher in Designing HOTS Assessment for Diverse Students

In this part, the researcher discussed deeply the challenges that finding in the field regarding the several theories. According to Master, there are several challenges in building educational assessment, they are repurposing assessment, implementing a learning assessment system, mapping learning domain, building assessment literacy, and concluding comments. But, in the fact, the researcher found 9 challenges that face by English teacher in designing Higher Order Thinking Skills assessment for diverse students. Two of them are appropriate with Master's theory, they are about mapping learning domain and building literacy assessment of student.

Most challenge found that faced by English teacher come from themselves. The major challenge of teacher is limited knowledge about Higher Order Thinking Skills assessment of English subject. It happened because teacher did not have a guide book to help them in designing Higher Order Thinking Skills question for English subject. Most of book and question that provided Higher Order Thinking Skills found in Math or Science. The guide book will help the teacher to know the guideline and principle to assess Higher Order Thinking Skills of student. Brookhart said that apply all of kind of assessment without general principle is fail.⁶³ Actually, the government had created a book to guide teacher in constructing HOTS question, but there was not questions that provided for language assessment. The book just showed the criteria not the example of question. The workshop training that held by the government also limited because only one teacher who participated for each school. Those challenges could minimize if the government provides a detail guide book for each subject who can access by

⁶³ Sussan Brookhart. *How to Asses High Order Thinking in Classroom*. (USA : ASCD), 2010, 18

CHAPTER V

This chapter of contains some conclusions regarding the result of this research that is about trends and challenge in designing Higher Order Thinking Skills assessment for diverse students. The suggestions relate this study also provided for English teacher and the further researcher.

A. Conclusions

Based on the result of research finding which is presented in previous chapter, the researcher conclude some points regarding the trends and challenge in designing Higher Order Thinking Skills for student which is described below.

1. Trends in Designing HOTS Assessment for Diverse Students

In case of aspect of thinking in Higher Order Thinking Skill, there are 3 aspects of thinking found in English teacher's question made that are *analysis*, *judgment and critical thinking* and logic and *reasoning* skill. There are four questions made by English teacher to assess *analysis* aspect of student in form of multiple choice question. For *judgment and critical thinking* and *logic and reasoning*, there is only one question each of them. Judgment and critical thinking question made in form of multiple choice question. While, for logic and reasoning aspect question made in essay form.

2. Challenges in Designing HOTS Assessment for Diverse Students

In term of challenges faced by English teacher in Designing Higher Thinking Skills assessment for diverse students, the researcher found some challenges which is showed below.

- a. Lack of knowledge about HOTS assessment

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